# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/583,693 | 05/31/2000 | Marcos N. Novaes | POU9-2000-0096-US1 | 4787 |

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| WON, YOUNG N |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2155 | 10 |

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _16 September 2003_ .

2a)☒ This action is **FINAL**.      2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1,2 and 7-74_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,2 and 7-74_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
            application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

| | |
| :--- | :--- |
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) ☐ Other: . |

## DETAILED ACTION

1.      Amended claims 1, 28, 51 and 52 have been examined and all remaining

dependent claims have been re-examined.  Claims 1, 2, and 7-74 are pending

with this action.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) do not apply to the examination of this application

as the application being examined was not (1) filed on or after November 29,

2000, or (2) voluntarily published under 35 U.S.C. 122(b).  Therefore, this

application is examined under 35 U.S.C. 102(e) prior to the amendment by the

AIPA (pre-AIPA 35 U.S.C. 102(e)).

2.      Claims 1, 2, 7-16, 19-23, 26-39, 42-46, 49-63, 66-70, 73 and 74 are

rejected under 35 U.S.C. 102(e) as being anticipated by Slaughter et al. (US

6014669 A).

As per claims 1, 28, 51, and 52, Slaughter teaches a method (see col.15,

line 49), a system (see col.1, line 16), and at least one program storage device

readable by a machine tangibly embodying at least one program of instructions

executable (see col.5, lines 5-7) by the machine to perform a method of

managing cluster configurations of a computing environment (see title), said

method, system, and program of instructions comprising: executing a distributed

configuration component on a plurality of nodes of a cluster of said computing

environment (see col.2, lines 31-38); and providing configuration consistency of

said cluster using the distributed configuration component (see col.2, lines 41-

42), wherein said providing configuration consistency comprises performing a

comparison between local data and global data (see col.5, lines 24-27).

As per claims 2, 29 and 53, Slaughter further teaches wherein said

providing comprises comparing data in a local storage with data in a global

storage to determine whether a node can join said cluster (see col.4, lines 48-52;

col.5, lines 24-27; col.7, lines 32-36; and col.7, line 58 to col.8, line 4).

As per claims 7, 30, and 54, Slaughter further teaches wherein said

providing configuration consistency comprises comparing data in a local storage

with data in a global storage to determine whether one or more components of

said cluster are to be initiated (see col.4, lines 48-52; col.5, lines 24-27; col.7,

lines 32-36; and col.7, line 58 to col.8, line 4).

As per claims 8, 31, and 55, Slaughter further teaches wherein said providing configuration consistency comprises controlling, at least in part, one or more operations associated with said cluster (see abstract: " Cluster operations include restore... and consistency checking" and col.2, lines 51-53).

As per claims 9, 32, and 56, Slaughter further teaches wherein said one or more operations comprise at least one of a define cluster operation used to create the cluster, and an undefined cluster operation used to erase a definition of the cluster (see col.2, lines 34-36 and 53-56; col.7, lines 14-16; and col.12, lines 18-26).

As per claims 10, 33, and 57, Slaughter further teaches wherein said one or more operations comprise a modify cluster operation used to modify one or more attributes of a definition of the cluster (see col.2, lines 34-50 and 56-60; col.3, lines 59-61; col.4, lines 65-67; and col.6, lines 15-67).

As per claims 11, 34, and 58, Slaughter further teaches wherein said one or more operations comprise at least one of a define node operation used to define a node to the cluster, and an undefined node operation used to erase a definition of a node of the cluster (see col.4, lines 48-52; col.8, lines 4-61; and col.11, line 66 to col.12, line 8).

As per claims 12, 35, and 59, Slaughter further teaches wherein said one or more operations comprise at least one of a define registry server node operation used to define a particular node in the cluster as a registry server node, and an undefined registry server node operation used to remove a node definition as a registry server node (see claim 9 rejection above). It is inherent

that nodes can be any computer network device such as a computer, server, or database (see Slaughter: col.3, lines 51-52).

As per claims 13, 36, and 60, Slaughter further teaches wherein said one or more operations comprise a modify node operation used to change one or more attributes of a definition of a node of the cluster (see col.2, lines 51-56).

As per claims 14-16, 37-39, and 61-63, Slaughter further teaches wherein said one or more operations comprise at least one of an online registry server operation used to initiate a system registry process on a node of the cluster, and an offline registry server operation used to stop a system registry process of a node of the cluster (see col.4, lines 14-33).

As per claims 19, 42, and 66, Slaughter further teaches wherein said one or more operations comprise at least one of a define network operation used to create a network of the cluster, and an undefined network operation used to erase a network definition of the cluster (see claim 9 rejection above; col.4, lines 44-47; and col.10, lines 52-56).

As per claims 20, 43, and 67, Slaughter further teaches wherein said one or more operations comprise a modify network operation used to modify one or more attributes of a network definition (see claim 10 rejection above; col.4, lines 44-47; and col.10, lines 52-56).

As per claims 21, 44, and 68, Slaughter teaches of further comprising commencing execution, via an operating system of the computing environment, the distributed configuration component (see claim 1 rejection). It is inherent that the execution of a distributed configuration component would be performed by a

processor resident on the computer environment running the operating system of that particular processor.

As per claims 22, 45, and 69, Slaughter teaches of further comprising, maintaining one or more data structures usable in providing configuration consistency (see col.2, lines 31-34).

As per claims 23, 46, and 70, Slaughter further teaches wherein at least one data structure of said one or more data structures is stored in local storage and global storage (see col.1, lines 12-15; col.2, lines 53-56; and col.5, lines 26-27).

As per claims 26, 49, and 73, wherein said one or more data structures comprise at least one node definition data structure for at least one node of said plurality of nodes of said cluster (see col.2, lines 34-36).

As per claims 27, 50, and 74, wherein said one or more data structures comprise a registry server nodes data structure identifying one or more registry server nodes of said cluster (see claim 26 rejection above). It is inherent that nodes can be any computer network device such as a computer, server, or database (see Slaughter: col.3, lines 51-52).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.      Claims 17, 18, 40, 41, 64, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter et al. (US 6014669 A) in view of Modiri et al. (US 6192401 B1).

As per claims 17, 18, 40, 41, 64, and 65, Slaughter further teaches wherein said one or more operations comprise at least one of a define operation used to define the cluster, and an undefined operation used to delete the cluster and wherein said one or more operations comprise a modify operation used to modify one or more attributes of a definition (see claim 9 and 10 rejections above). Slaughter does not explicitly teach of a sub network. Modiri teaches of a sub network (see col.2, lines 22-25 & 46-59). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Modiri within the system of Slaughter by implementing a sub network within the cluster configuration management method, system, and program because Modiri teaches that this results in "the cluster reconfiguring with an optimized configuration" (see Modiri: col.2, lines 60-62), and Slaughter teaches that he "desires" what is high availability, minimal interrupts, and "fast and efficient queries" (see Slaughter: col.2, lines 19-25).

4.      Claims 24, 25, 47, 48, 71, and 72 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Slaughter et al. (US 6014669 A) in view of Zhang et al.

(US 5832182 A).

As per claims 24, 47, and 71, Slaughter does not teach wherein said one

or more data structures comprise a cluster data structure associated with said

cluster.  Zhang teaches of a cluster data structure (see col.27, claim 1).  It would

have been obvious to a person of ordinary skill in the art at the time the invention

was made to employ the teachings of Zhang within the system of Slaughter by

implementing a cluster data structure within the cluster configuration

management method, system, and program because Zhang teaches that such

implementation maximizes efficiency and accuracy (see Zhang: col.5, lines 11-

14) and Slaughter teaches that he "desires...fast and efficient queries" (see

Slaughter: col.2, lines 19-25).

As per claims 25, 48, and 72, Slaughter further teaches wherein said

cluster data structure comprises a unique cluster identifier for the cluster (see

abstract).

### Response to Arguments

5.      Applicant's arguments filed September 16, 2003 have been fully

considered but they are not persuasive. Explanation is recited below.

Clearly, Slaughter teaches the element of "performing a comparison

between local data and global data" (see col.5, lines 24-27).  Slaughter clearly

teaching the process of ensuring "consistency of the data" whether it is local or global and the comparison there between is implicit. The process of checking is by definition "comparing with a source, original, or authority".

All claims 1, 2, and 7-74 remain rejected.

### *Conclusion*

6.      Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
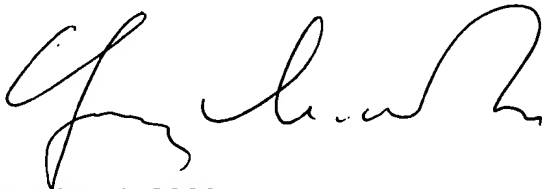
7.      Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Young N Won whose telephone number is

703-605-4241.  The examiner can normally be reached on M-Th: 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Hosain T Alam can be reached on 703-308-6662.  The

fax phone number for the organization where this application or proceeding is

assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application

or proceeding should be directed to the receptionist whose telephone number is

703-305-3900.


Young N Won


November 4, 2003



**HOSAIN ALAM**
**SUPERVISORY PATENT EXAMINER**